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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,653	02/16/2001	Michael James Hunter	4-13-4	2985

7590 08/27/2003  
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EXAMINER

DANG, KHANH NMN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n No.

09/785,653

Applicant(s)

HUNTER ET AL.

Examiner

Khanh Dang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Specification***

The status of related applications (page 1 of the specification) must be updated if possible.

***Claim Rejections - 35 USC § 112***

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-7 are directed to device. However, the essential structural cooperative relationships between elements recited in the claims have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Claims 4 and 5 are identical.

Claims 8-11 are directed to device. However, the essential structural cooperative relationships between elements recited in the claims have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1, 2-5, 8, 10-12, 14, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Nomura.

At the outset, it is noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, claims 1-15 do not define any structure that differs from Nomura. With regard to claim 1, Nomura discloses a bidirectional bus repeater circuit (generally shown in Fig. 4), comprising: a connector to a first segment of a bidirectional bus (see Fig. 2); a connector to a second segment of a bidirectional bus (see Fig. 2); and a pair of buffers (111, 112) for each bit on the bidirectional bus, each buffer in the pair transferring data in a given direction on said bidirectional bus based on a direction control signal. With regard to claims 3 and 10, the circuit of Nomura also includes a direction control block (including OR circuit/S161L/S161R)) that controls the direction control signal based on activity on an indicator line (S141) associated with the bidirectional bus. With regard to claims 4, 5, and 11 the node or device connected to the bidirectional bus must toggle (using OR circuit, for example) the indicator line in order to drive the bidirectional bus. With regard to claim 8, Nomura discloses a bidirectional bus, comprising: a first segment connected to one or more nodes (see Fig. 2); a second segment connected to one or more nodes (see Fig. 2); and a bidirectional bus repeater (111/112) having a pair of buffers (see Fig. 4) for each bit on the bidirectional bus, each buffer in the pair transferring data in a given direction on the bidirectional bus based on a direction control signal. With regard to claims 12, 14, and 15, one using the device of Namura would have performed the same steps set forth in claims 12, 14, and 15.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Okazaki.

At the outset, it is noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, claims 1-15 do not define any structure that differs from Okazaki. With regard to claims 1 and 8, Okazaki discloses a bidirectional bus repeater circuit, comprising: a connector (see Fig. 1) to a first segment of a bidirectional bus (a bus providing connection between bus A and bus B); a connector (see Fig. 1) to a second segment of a bidirectional bus (a bus providing connection between bus A and bus B); and a pair of buffers (11, 12) for each bit on said bidirectional bus, each buffer (11, 12) in the pair transferring data in a given direction on the bidirectional bus based on a direction control signal. With regard to claims 2 and 9, the device of Okazaki further comprises an additional pair of buffers (2, 3) associated with a pair of indicator lines (S2, S3) controlling the direction control signal. With regard to claims 3 and 10, the device of Okazaki further comprises a direction control block (5) that controls the direction control signal based on activity on an indicator line associated with the bidirectional bus. With regard to claim 4, 5, and 11, it is clear that a given node connected to the bidirectional bus must toggle (ON/OFF switching in Okazaki) the indicator line in order to drive the bidirectional bus. With regard to claim 6, the direction control signal is activated upon a change of voltage (by bias circuit 4) on an indicator line associated with one of the segments of the bus to enable the corresponding buffers. With regard to claim 7, see explanation regarding claim 6. See also col. 2, line 60 to col. 3, line 54). With regard to claims 12-15, it is clear that one using the device of Okazaki would have performed the same steps set forth in claims 12-15.

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U.S. Patent Nos. 5,736,870 to Greason et al., 6,522,169 to Anderson et al., and 6,567,871 to Koh et al. are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.

A handwritten signature in black ink, appearing to read "Khanh Dang", written in a cursive style.

Khanh Dang  
Primary Examiner